

**SUSPENSION DESIGN FOR ATTENUATION OF DISK FLUTTER INDUCED  
TRACK MIS-REGISTRATION OF A HARD DISK DRIVE BY MANIPULATION OF  
LOAD BEAM PITCH ANGLE**

**ABSTRACT OF THE DISCLOSURE**

A disk drive includes a head gimbal assembly that includes structure that decreases the pitch angle of the load beam, which decreases disk flutter induced track mis-registration. According to one embodiment, the disk drive includes a body portion including a bore defining a pivot axis; an actuator arm cantilevered from the body portion and a head gimbal assembly (HGA) supported at the actuator arm. The HGA includes a load beam having a first end and a second end, the first end being attached to the actuator arm, the load beam defining a load beam feature near the second end, at least a portion of the load beam feature defining an extension that is parallel to the pivot axis and that has a rectangular cross-section having a length to width aspect ratio that is greater than 1. A slider is coupled to a free end of the load beam extension, and a gimbal coupled to the second end of the load beam and to the slider.